

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A cold cathode forming process comprising a step for providing a target material and a substrate in a reaction chamber, a step for controlling the pressure (P) of an ambient gas introduced into the reaction chamber and the distance (D) between the substrate and the target material so that the size of a high temperature high pressure area formed near the target material by irradiating a beam light onto the target material is optimal, and a step for exciting and ejecting the material contained in the target material by irradiating the beam light onto the target material with introducing the ambient gas into the reaction chamber at the pressure to deposit the material on the substrate.

2. (original) The cold cathode forming process as claimed in claim 1, wherein the pressure (P) of the ambient gas and the distance (D) between the substrate and the target material are controlled according to the relation $PD^n = \text{constant}$ (n is approximately 2 to 3).

3. (original) The cold cathode forming process as claimed in claim 1, wherein the ambient gas is an inert gas.

4. (original) The cold cathode forming process as claimed in claim 1, wherein the pressure of the ambient gas is in the range from 0.1 to 10 Torr.

5. (original) The cold cathode forming process as claimed in claim 1, wherein the material that constitutes the target contains at least two compositions.

6. (original) The cold cathode forming process as claimed in claim 1, wherein the material that constitutes the target material is any one compound of LaB_6 , TiC , SiC , and SnC .

7. (original) The cold cathode forming process as claimed in claim 5, wherein the material that constitutes the target material is any typical nitride of TiN , BN , SrN , ZrN , and HfN .

8. (original) The cold cathode forming process as claimed in claim 5, wherein the material that constitutes the target material is any one transparent conducting material of In_2O_3 , SnO_2 , ITO , ZnO , TiO_2 , WO_3 , and CuAlO_2 .

9-24 (canceled).